

# **Archery White-tailed Deer Hunting Supplement to the Whittlesey Creek National Wildlife Refuge Environmental Assessment For Public Use Plan**

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## **Purpose and Need**

The purpose of this Supplement is to clarify actions that will be taken under the selected alternative for the Whittlesey Creek National Wildlife Refuge Public Use Plan. A Public Use Plan and Environmental Assessment (EA) for Whittlesey Creek National Wildlife Refuge (Refuge) was prepared by Refuge staff and approved by the Regional Director on August 6, 2001. The public use plan and EA outline six wildlife-dependent uses that are priority for the Refuge: wildlife observation, wildlife photography, environmental education, interpretation, hunting and fishing. The preferred alternative stated “because of the small size of the Refuge, the few lands that have been acquired, and the proximity of residences, the Service will consider opening appropriate lands to waterfowl hunting and evaluate other hunting opportunities as additional lands are acquired”. Over 100 additional acres have been acquired by the Service since 2001 so we are proposing to open Refuge lands to archery deer hunting (Figure 1). This

supplement describes the proposal to allow archery deer hunting and related environmental consequences.

## **Preferred Alternative**

The preferred alternative presented in the Environmental Assessment to the Whittlesey Creek Public Use Plan, relating to hunting and access, is as follows:

### **“2.4.2 Alternative 2 - Compatible Public Uses, Including Hunting (Preferred Alternative)”**

The general philosophy for public use on the refuge would be: “Everything the Service does in relation to the Refuge (management, restoration, public uses, monitoring, research) will be viewed as an opportunity to provide public participation and teach/encourage environmental stewardship. Programs and activities will be developed to create in our visitors:

- Awareness and ecological understanding of the Refuge and adjacent landscape
- Knowledge of how humans affect the natural system
- Understanding of the value of habitat for fish and wildlife
- Recognition of fish and wildlife values in general.”

Six wildlife-dependent uses are considered priority recreational uses for this Refuge: wildlife observation, wildlife photography, environmental education, interpretation, hunting and fishing. In addition, research is considered a priority use, but is not public/recreational use. Use guidelines under this alternative are described below.

#### ***Hunting:***

Guidelines for hunting on refuge lands would be limited to waterfowl hunting for this alternative. The Service would consider providing hunting opportunities for upland birds, deer and other species on Refuge lands once additional properties are acquired and the Service understands public needs and evaluates safety issues.

An Interim Waterfowl Hunting Plan would be developed for the Refuge. In general, the Service would follow all regulations of the State of Wisconsin on lands it owns. The following interim guidelines would be followed.

#### **General**

Hunters would be required to follow all state laws and regulations. This includes no shooting within 100 yards of a residence without permission of the resident. The Service does not allow baiting on any refuge system lands, so baiting would not be allowed on the Refuge.

Ground or elevated blinds may be used if they do not damage live vegetation and are completely removed from the property each day at the close of the hunting hours. Ground blinds may be constructed entirely of dead vegetation from on the property.

Nontoxic shot is required for all shotgun use on the refuge. A no-hunting buffer on lands the Service owns adjacent to the Northern Great Lakes Visitor Center would be established for visitor safety needs.

### **Waterfowl Hunting**

Waterfowl hunting would be allowed on Refuge lands east of Highway 13 as provided in the Interim Hunting Plan. The Service would not limit use unless high demand creates safety concerns. Most waterfowl hunters respect spacing needs between hunters and blinds and would be self-regulating. Most waterfowl hunting in the proposed Refuge currently takes place along and near the Lake Superior shore.

### ***Orientation and Access to the Refuge:***

A clear system of welcome and orientation signs would allow visitors to know where to go, what recreation, interpretation, and educational opportunities are available, any limits on uses, and how to make the best use of their time while visiting the Refuge. Physical developments to accommodate public use and enjoyment of the Refuge would initially be limited to small parking areas and informational and educational signs. The Service would construct short hiking trails and wildlife observation areas. All facilities developed would be accessible to people with disabilities. Generally, lands would be open during daylight hours. All use on the Refuge would be non-motorized, except on public roads and the existing snowmobile trail.”

## **Detailed Description of Supplemental Proposed Action**

The U.S. Fish and Wildlife Service (Service) proposes to open lands owned by the Service (Service) within the Whittlesey Creek National Wildlife Refuge (Refuge) to public hunting of white-tailed deer by archery hunters. Hunters will be required to follow all State laws and regulations for archery deer hunting, except no baiting will be allowed.

Refuge specific regulations that will apply are:

- Archery deer hunting will be allowed to take place on Refuge lands owned by the Service that constitute tracts greater than 20 acres.
- Ground blinds or any elevated device on Refuge lands may be used only if they do not damage live vegetation, including trees.
- The following are considered damaging and are illegal:
  - cutting of shooting lanes
  - screw-in tree-stands or steps
- Ground blinds and any elevated devices must completely be removed from the Refuge each day at the close of the hunting hours.
- Ground blinds may be constructed entirely of dead vegetation from on the property.
- No hunting will be allowed within a buffer around the Coaster Classroom site and boardwalk of the Northern Great Lakes Visitor Center.
- No baiting will be allowed.
- Motorized vehicles are allowed only on public roads and parking areas.

Archery hunters will be encouraged to check-in at Refuge headquarters, but no Refuge-specific permit will be required or issued. Tagging of harvested deer must follow state regulations, but the Service will request that hunters notify us of harvested deer.

We will encourage hunters to come to Refuge headquarters before they hunt to receive a packet of information about the archery hunt. The Service will provide annual information about where archery deer hunting is allowed each year through maps and flyers that will be available at the Northern Great Lakes Visitor Center (Refuge headquarters) or on the Whittlesey Creek National Wildlife Refuge web page. No other orientation of pre-hunt scouting will be provided by staff. Hunters are encouraged and welcome to scout Refuge lands during daylight hours before hunting.

The Service does not anticipate a large demand to hunt Refuge lands. There are several hundred thousand acres of federal and county forest lands available for archery hunting within 30 miles of the Refuge. We expect that most hunters will be nearby neighbors and landowners who own land within the Refuge boundary.

## **Affected Environment**

### ***Landscape of Whittlesey Creek National Wildlife Refuge***

The Refuge is located in the coastal area of Lake Superior at the mouth of Whittlesey Creek, which is part of a large wetland complex that extends from just north of the mouth of Whittlesey Creek to the west edge of the City of Ashland, Wisconsin (Figure 1). This coastal wetland complex is a significant part of the wildlife habitat and aquatic resources of Chequamegon Bay. The area is used by many fish and wildlife species and is an important area for migrating birds.

The Refuge also encompasses the mouth of Whittlesey Creek, so it is located at the downstream end of the Whittlesey Creek watershed. The Whittlesey Creek Priority Watershed Project plan provided a description of the watershed (Gardner and Malischke 1996). The Whittlesey watershed, including both groundwater and surface water drainages, covers 18 square miles. Characteristics include:

- Land uses in the watershed are agriculture and forest related. The area is dotted with farms and rural dwellings.
- Public lands within the watershed include about 7,600 acres within the Chequamegon National Forest boundary.
- Agricultural lands account for 14% of the total drainage area, and 50% of the total are National Forest lands. The remaining 36% of the area includes natural areas such as wetlands, woodlots, and small rural plots.
- Although there has been a decline in the number of operations, agriculture is still an important land use in the watershed.
- Whittlesey Creek currently has good water quality and is classified as an outstanding resource water.
- The stream is a class I trout water supporting both salmonid and non-salmonid

fish species. It is also a regionally important spawning area for anadromous trout and salmon from Lake Superior.

### ***Vegetation***

Lands within the fee-title boundary of the Refuge are Lake Superior coastal wetlands, sedge meadow, lowland hardwood swamp, black spruce swamp, other palustrine emergent wetland types, created palustrine non-vegetated ponds, and planted grassy fields. Whittlesey, Little Whittlesey and Terwilliger creeks flow through the Refuge, collecting water from the many cold-water spring upwellings in the streams and bordering wetlands.

Fish and wildlife habitats in the Refuge have been altered substantially by human use. Both bottom land forest and sedge meadow were converted for agricultural use earlier this century. Portions were altered further for construction of a golf course. Four non-vegetated ponds were created during construction of the golf course and nonnative grasses and conifers were introduced. Changes in water regime as well as past land use have changed wetland vegetation; most of the low-lying acres are dominated by reed canary grass, a non-native invasive wetland plant. Some wet meadow acres, especially those that have been left unused for a decade or more, are regrowing to shrubs such as willow and alder, and might eventually regrow to lowland swamp with black ash and cedar.

### ***Hydrology***

The Whittlesey Creek watershed covers approximately 12,000 acres when both surface groundwater recharge and surface water contributing areas are included. The groundwater recharge portion of the watershed is found to the west in the upper reaches, which have deep sand deposits. Most of this portion of the watershed is contained in the Chequamegon-Nicollet National Forest. This area moves surface water through a thick layer of sand (up 400 feet deep) that discharges into Whittlesey Creek at various points. This system provides year-round base flow in Whittlesey Creek of about 18 cubic feet per second (cfs).

The surface water contributing area is approximately 4,700 acres, which includes Whittlesey Creek, the North Fork of Whittlesey Creek, and numerous small tributaries that enter both. The elevation of the surface water contributing area changes from 1,100 feet mean sea level (msl) at the upper end, to about 600 feet msl at Lake Superior. Soils of the surface water area are dominated by heavy clays, which along with relatively steep terrain, gives rain and snowmelt little chance to infiltrate. The result is a very flashy stream that peaks quickly within 24 hours of a large rainfall or snowmelt.

In 1949, the Army Corps of Engineers dredged 4,500 feet of the Whittlesey Creek stream channel in an effort to dewater and stabilize the floodplain. Meanders were removed and a straight channel was constructed from Highway 13 to Lake Superior. In 1958, the channel was redirected toward its natural mouth because sand deposits had filled the dredged channel. Effects of this channelization are still seen today, with much of the lower end of Whittlesey Creek experiencing accretion from sediment build-up and unstable hydrology.

## ***Fish and Wildlife***

*Fish* - A species list compiled from information gathered by the Wisconsin DNR and Service's Sea Lamprey Management identified 21 species of fish, including seven salmonid species found in Whittlesey Creek. Whittlesey Creek supports a recreational fishery, primarily for brook trout and rainbow trout. It is also an important spawning stream for the naturalized coho salmon.

The Service and the Wisconsin DNR are conducting an experimental rehabilitation program for coaster brook trout in Whittlesey Creek. The experiment includes a stocking plan over seven years; the first stocking took place in 2003 and will continue each year until 2009.

Habitat degradation within Whittlesey Creek has lowered the productive capacity of this stream, particularly for brook trout. Substrate suitable for spawning and woody debris important as rearing habitat and for aquatic insect production have been degraded by high flows which erode stream banks, remove woody debris, and redeposit coarse materials in unsuitable areas. As the water level recedes, sedimentation results.

*Birds* – Area and Service biologists have identified 226 species of birds in the area, including waterfowl, neotropical migrants, raptors, grassland and shore birds, as well as several amphibian and state listed plant species of concern. The 540 acres within the proposed Refuge boundary will complement the 2,000 acres of coastal wetlands owned and managed by the Wisconsin DNR and City of Ashland. These wetlands, woodlands in the watershed and agricultural grasslands provide resting and breeding habitat for waterfowl and neotropical migratory birds.

*Mammals* – Over 50 mammals have been noted in the area of and surrounding the Refuge. Mammals that are notable for northern Wisconsin include black bear, gray wolf and fischer.

We do not have Refuge-specific population information on state-managed white-tailed deer. However, the Wisconsin Department of Natural Resources (WI DNR) estimates the white-tailed deer population for Deer Management Unit 3 (see deer zone map, Figure 2) to be 26 deer per square mile. The population density varies, with high populations in the upper part of the watershed. The summer population increases by 35 to 40 percent with fawn recruitment (personal communication with Todd Naas, Wildlife Biologist with the WI DNR).

*Reptiles and Amphibians* – Fifteen reptiles and 10 amphibians have been noted from the region. The wood turtle is listed as state threatened. We are not sure whether the wood turtle is found in Whittlesey Creek, but we assume there is suitable habitat for it.

*Federally Threatened and Endangered Species* - Four federally listed threatened and endangered species occur in the Lake Superior region of northern Wisconsin: the bald eagle, gray wolf, Canada lynx and piping plover. Bald eagles nests within a couple miles of the refuge and uses the Refuge and surrounding wetlands as a food source. There are no eagle nests on the refuge. Numerous sighting of gray wolf have been made in or near the refuge. Occasional sightings of piping plovers have been made at the mouth of Whittlesey Creek during migration. Piping plovers have recently nested on select beaches of the Apostle Islands. No Canada lynx have been sighted in the refuge or vicinity.



## ***Cultural Resources***

Twenty two properties in Bayfield County had been placed on the National Register of Historic Places. None of the properties are located within the boundaries of the proposed refuge or within Barksdale township. There were thirteen buildings or farmstead complexes within the proposed boundary when it was established. Five of these have been removed once the Service acquired them. One of the homes remaining may have been the home of Asaph Whittlesey, founder of Ashland, Wisconsin, in 1860, and after whom Whittlesey Creek was named. Also within the proposed boundaries could be the site of the cabin built by Pierre Esprit Radisson in 1664 (Adams 1961 and Vestal 1940). The Refuge Manager considers potential impacts of management activities on historic properties, archeological sites, traditional cultural properties, sacred sites, human remains and cultural materials.

## ***Public Use***

The Whittlesey Creek NWR is open to wildlife-dependent public uses, including wildlife observation, wildlife photography, environmental education, interpretation, waterfowl hunting (east of Hwy. 13) and fishing. The refuge's headquarters and point of contact for visitors is the Northern Great Lakes Visitor Center, which is located immediately south of the Refuge. In 2004, 160,000 visitors came to the Visitor Center, where they can access refuge information and view the Whittlesey Creek exhibit, along with many other Great Lakes' exhibits. The Service also provides interpretive and education programs at the Visitor Center in cooperation with Center partners.

A three-season environmental education shelter with accessible trails and parking is the only visitor facility on the refuge. The Public Use Plan recommends that additional parking and trail facilities be built once lands are acquired and funds are available. The specific locations of these facilities aren't yet known, but they must be compatible with habitat restoration plans. No section of the Refuge is closed to the public, so visitors can walk anywhere on Refuge lands owned by the Service. Motorized vehicle use is prohibited except on public roads.

## ***Habitat Management and Restoration***

Refuge staff have initiated habitat restoration, including reforestation and wetland restoration. A habitat management plan, currently in draft stage, will guide future habitat restoration work in floodplains, wetlands, streams and uplands. They will follow goals established for the Refuge and modified for the Habitat Management Plan:

- Restore watershed and stream hydrologic functions that improve fish and wildlife habitat within the stream and the refuge, with an emphasis on native species.
- Plan and implement a project to reintroduce coaster brook trout, under the guidance of the Lake Superior Brook Trout Rehabilitation Plan (Newman et al. 1999).
- Contribute to the restoration of natural species diversity of migratory birds that use coastal wetlands and stream floodplain habitats.
- Reduce sediment loads into Whittlesey Creek to historic (pre-European settlement) range of variability.
- Restore to the extent possible historical hydrologic conditions in the coastal wetlands and floodplains of the refuge.

- Manage for compatible wildlife-dependent recreational uses, including environmental education, hunting, fishing, wildlife-viewing, and demonstrating restoration and management techniques.
- Conduct all management activities with an ecosystem approach in cooperation with agencies that manage adjacent and nearby lands and facilities.

Restoration and management objectives and strategies focus on resources of concern, mostly habitat for Coaster brook trout and migratory birds.

## **Environmental Consequences**

The annual impacts caused from public use in general are described in detail in the document: “Environmental Assessment for the Public Use Plan, Whittlesey Creek National Wildlife Refuge Bayfield County, Wisconsin” dated April 6, 2001. The impacts from the proposed archery deer hunt are specified in the remainder of this section.

### ***Habitat***

Archery deer hunters are not allowed to impact live vegetation according to proposed regulations. If we find that archery hunters are not following this regulation, we will likely close archery hunting.

Hunters are not allowed to bait, which helps safeguard the spread of invasive species that could be associated with bait.

The proposed action should not affect the Refuge’s habitat or the Services ability to restore and manage habitat.

### ***Hydrology***

The proposed action will have no effect on the Refuge’s hydrology or on the Services ability to restore hydrology in the future.

### ***Fish and Wildlife Populations***

Hunting of resident wildlife on the Refuge is not considered a means to manage regional population goals established by the WI DNR. Rather, hunting resident wildlife are considered for their compatibility with Refuge goals (see Compatibility Determination appended to the Hunting Plan).

Archery deer hunting will have a minimal effect on the deer population in both the Refuge and within the DNR’s deer management unit 3. We anticipate that at most, 10 deer will be harvested from Refuge lands.

### ***Threatened and Endangered Species***

The proposed action should not impact threatened or endangered species.



## ***Cultural Resources***

The proposed action should not impact cultural resources.

## ***Public Use Conflicts***

Conflicts could occur between non-consumptive users and archery hunters, especially in September and early October, when visitation remains high at the Northern Great Lakes Visitor Center and in the Coaster Classroom. The Service will manage public use to avoid conflicts as much as possible by prohibiting archery hunting within a buffer near the Visitor Center's boardwalk and around the Refuge's Coaster Classroom site.

Archery hunters are very inconspicuous and will shoot a deer only when it is within about 30 yards or less. Their mode of hunting minimizes use conflicts. However, other users could disrupt the experience for a hunter when they are not aware that the hunter is in her/her blind/stand. We are not proposing to control these situations; hunters will have to accept the potential for interference from other users.

## **References**

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**Public Involvement and Comments Received:**

(To be completed after public review)

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# Whittlesey Creek National Wildlife Refuge Lands Acquired As Of December 2005

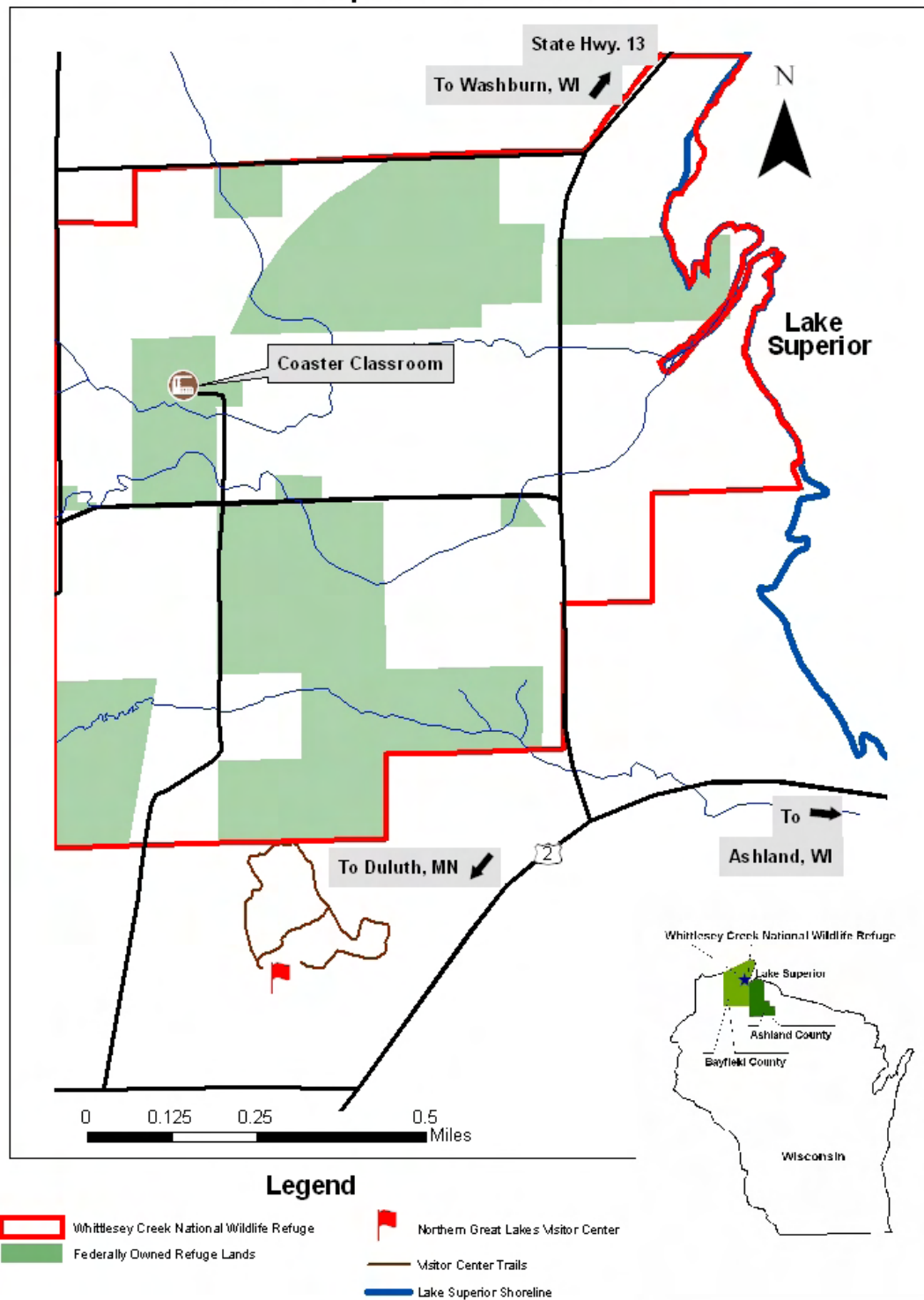


Figure 1. Location of Whittlesey Creek National Wildlife Refuge and Refuge Boundary.

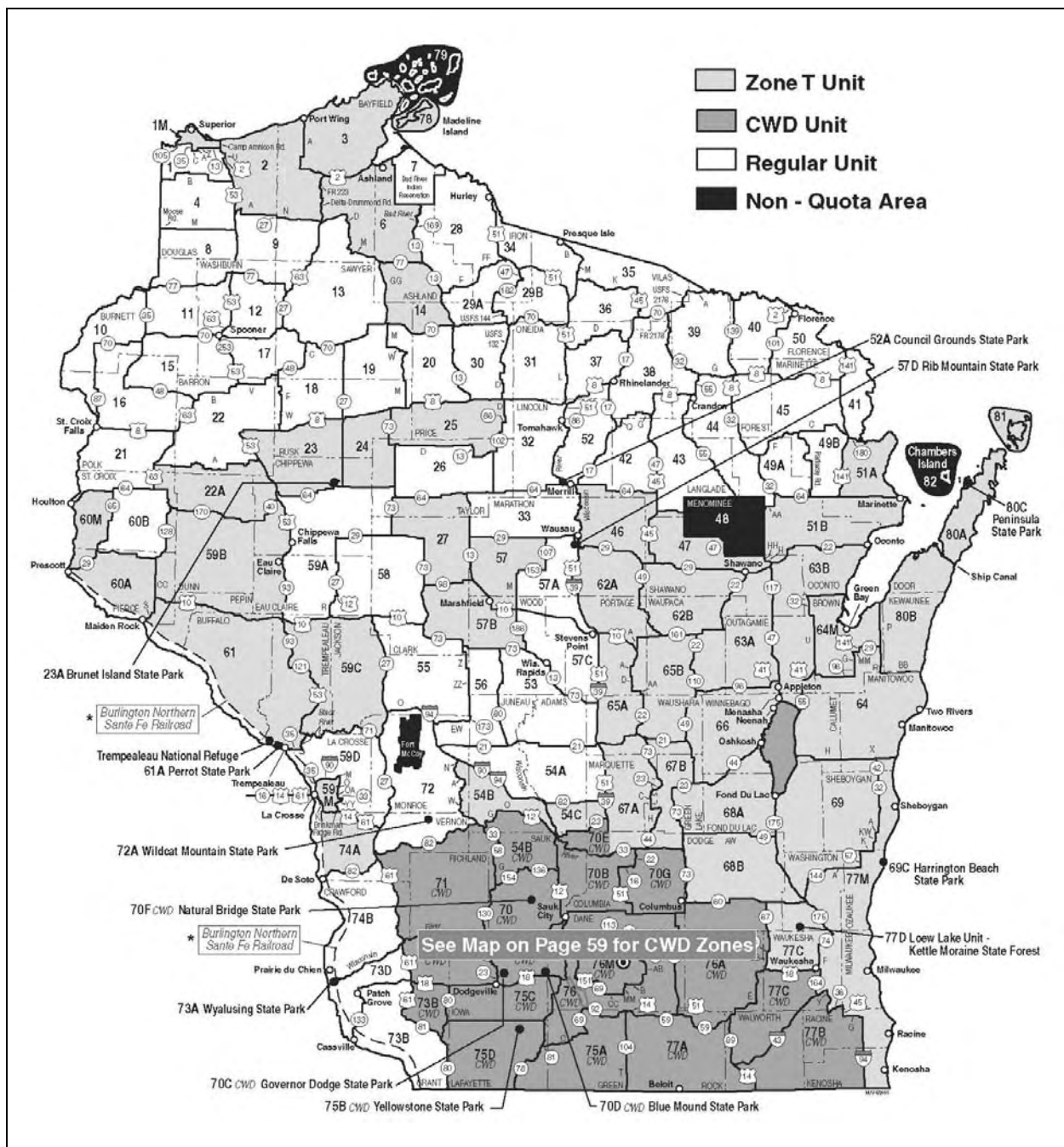


Figure 2. Wisconsin DNR deer management units. The Refuge is located within Unit 3.